

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method ~~Method~~ for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks, ~~in which method, for~~ comprising:

requesting access, via a mobile IP node, to a WLAN at an access point, a basic service area of the WLAN including one or more access points assigned to an access server;

authenticating, authentication, via a wireless interface within ~~a the~~ basic service area of ~~a the~~ WLAN, the a mobile IP node ~~requests~~ requesting access to the ~~WLAN at~~ an access point, ~~the basic service area of the WLAN including one or more access points assigned to an access server,~~ WLAN; and

transmitting from the mobile IP node, in which method, upon request from the access server, ~~the mobile IP node transmits~~ an IMSI stored on a SIM card of the mobile IP node to the access server, ~~and the IMSI of the mobile IP node is being stored~~ in a database of a SIM-RADIUS module,

wherein, characterized in that, based on the IMSI, ~~the logic a logical~~ IP data channel of the WLAN is user-specifically supplemented towards corresponding GSM data for signal and data channels of a GSM network by means of information stored in ~~an a~~ SIM user database, ~~in that~~

by means of a SIM gateway module, to perform ~~the authentication an~~ authentication of the mobile IP node, ~~the necessary SS7/MAP functions are generated based on the GSM data, in that,~~

by means of ~~a the~~ SIM user database and the SIM gateway module, the SIM-RADIUS module performs the authentication of the mobile IP node at ~~a an~~ HLR ~~and/or or a~~

VLR of ~~a~~ the GSM network, based on the IMSI of the SIM card of the mobile IP node, and ~~in~~ that

with successful ~~authentication~~ ~~a location update is performed at the HLR and/or VLR, and~~ authentication, (1) an authorization of the mobile IP node is performed, a corresponding user profile based on the IMSI being downloaded at the HLR and/or VLR, (2) the mobile IP node receives a corresponding entry in a customer database of the access server, and (3) the WLAN being is released for use by the mobile IP node.

2. (Canceled)

3. (Currently Amended) The method ~~Method~~ for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks according to claim 1, wherein, ~~characterized in that, for the authentication of in~~ authenticating the mobile IP node, the IMSI stored on the SIM card of the mobile IP node is only used up to one or more of the first authentication stages ~~and that for all further authentication stages the IMSI is then~~ replaced by a generated temporary IMSI.

4. (Currently Amended) The method ~~Method~~ for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks according to claim 1, wherein ~~characterized in that the authentication of~~ authenticating the mobile IP node is performed by means of an extensible authentication protocol.

5. (Currently Amended) The method ~~Method~~ for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks according to claim 1, wherein, ~~characterized in that the~~ a data stream of the mobile IP node is directed via a mobile radio network service provider during access to the WLAN from the access point.

6. (Currently Amended) The method ~~Method~~ for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks according to claim 5, wherein, ~~characterized in that, based on the authentication~~ authenticating by means of the IMSI, the

mobile radio network service provider issues ~~the a~~ corresponding service authorization for use of different services ~~and/or or~~ performs ~~the billing of the service availed of. a used~~ service.

7. (Currently Amended) The method ~~Method~~ for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks according to claim 1, wherein, ~~characterized in that~~ the SIM user database is connected to a sync module and a sync database for changing or deleting existing user datasets or for inserting new user datasets, ~~the a~~ comparison of ~~the~~ databases being carried out periodically ~~and/or or~~ initiated by changes in the sync database or through failure of the SIM user database.

8. (Currently Amended) The method ~~Method~~ for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks according to claim 1, wherein, ~~characterized in that,~~ by means of a clearing module 533 for ~~the~~ billing, ~~the~~ billing records of the heterogeneous WLANs are synchronized with the user data and processed based on ~~the~~ GSM-Standard TAP.

9. (Currently Amended) A system ~~System~~ for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks, ~~which system includes~~ comprising:

at least one WLAN, with a basic service ~~area in each case, which area, the~~ basic service area of ~~a WLAN~~ the at least one WLAN includes including one or more access points assigned to an access server, ~~which the one or more access points include including~~ a wireless interface for communication with at least one mobile IP nodes node, and which the at least one mobile IP nodes include an node including a SIM card for storage of an IMSI, ~~characterized,~~ IMSI; and

a SIM gateway module,

wherein the access server further comprises:

a SIM-RADIUS module that stores an IMSI database;

a SIM user database; and

a customer database;

~~in that the access server includes an SIM RADIUS module with a database)~~
~~for storage of the IMSI, server, based on the IMSI and by means of~~ with information stored in
~~an SIM~~ the SIM user database, ~~the~~ supplements a logical IP data channel of the WLAN ~~being~~
~~supplemented~~ user-specifically towards GSM data for signal and data channels of a GSM
network, ~~in that the system includes an~~ and, via the SIM gateway module,
~~by means of which to perform the~~ an authentication of the mobile IP
~~node~~ node, necessary SS7/ MAP functions are ~~able to be~~ generated based on the GSM data,
and in that

by means of the SIM user database and the SIM gateway module, the SIM-
RADIUS module performs the authentication of the mobile IP node at an HLR or a VLR of
the GSM network, based on the IMSI of the SIM card of the mobile IP node, and ~~the access~~
server includes a customer database, in which

~~authenticated with successful authentication,~~ users of the WLAN can be
entered into the customer database by means of the SIM-RADIUS ~~module, during the entry a~~
~~location update of the IMSI of the mobile IP node being performed at the HLR and/or VLR,~~
module.

10. (Canceled)

11. (Currently Amended) The system ~~System~~ for automatic roaming between
heterogeneous WLANs and/or GSM/GPRS/UMTS networks according to claim 9, wherein,
~~characterized in that, for in~~ the authentication of the mobile IP node, the IMSI stored on the
SIM card of the mobile IP node is replaceable ~~in at least one of the authentication stages by a~~
temporary IMSI generated by means of a module.

12. (Currently Amended) ~~The system~~ System for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks according to claim 9, ~~characterized in that~~ wherein the authentication of the mobile IP node can be performed by means of ~~the Extensible Authentication Protocol~~ an extensible authentication protocol.

13. (Currently Amended) ~~The system~~ System for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks according to claim 9, ~~characterized in that~~ wherein the system includes of a mobile radio network provider via whom ~~the data~~ data stream of the mobile IP node is able to be rerouted from the access point during access to the WLAN.

14. (Currently Amended) ~~The system~~ System for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks according to claim 13, ~~characterized in that~~ wherein the mobile radio network provider includes ~~a authorization~~ an authorization module, which, based on the authentication by means of the IMSI, issues ~~the corresponding~~ a corresponding service authorization for use of different services, ~~and/or~~ or includes a clearing system that carries out ~~the billing for the service availed of~~ of a used service.

15. (Currently Amended) ~~The system~~ System for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks according to claim 9, further comprising ~~characterized in that the system includes~~ a sync module with a sync database, by means of which the SIM user database is connected for changing or deleting existing user datasets or for inserting new user datasets, ~~the a comparison of the databases being carried out periodically~~ and/or or initiated by changes in the sync database ~~and/or~~ or through failure of the SIM user database.

16. (Currently Amended) ~~The system~~ System for automatic roaming between heterogeneous WLANs and/or GSM/GPRS/UMTS networks according to claim 9, wherein,

characterized in that, by means of a clearing module 533 for the billing, the billing records of the heterogeneous WLANs are able to be synchronized with the user data and are able to be processed based on the ~~GSM-standard~~ GSM-standard TAP.